



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,224	11/01/2001	Shunpei Yamazaki	07977/288001/US5290/5981	2987
26171	7590	07/01/2004		
FISH & RICHARDSON P.C. 1425 K STREET, N.W. 11TH FLOOR WASHINGTON, DC 20005-3500			EXAMINER TANG, SON M	
			ART UNIT 2632	PAPER NUMBER

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/016,224

Applicant(s)

YAMAZAKI, SHUNPEI

Examiner

Son M Tang

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 17-19, 21-22, 24-25 and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Lange et al. [US 6,642,840].

Regarding to claims 1-4: Lange et al. disclose a vehicle comprising:

- a side mirror [26] and back mirror [24];
- a camera [8];
- a display device [6] mounted in the side mirror 26 and back mirror 24, wherein the display device displays information read from the camera [shown in Fig. 1-6, col. 3, lines 40-54, and col. 4, lines 37-50].

Regarding to claims 17-19, 21-22, 24-25, and 27-19: Lange et al. further disclose a LCD display and wherein a half mirror is provide in the side mirror [cited in col. 3, lines 55-62].

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2632

3. Claims 20, 23, 26, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. [US 6,642,840] in view of Lin [US 5,956,181].

Regarding to claims 20, 23, 26, and 30: Lang et al. disclose all the limitation as described above, Lang et al. does not specify that the display is an electroluminescent display device. It is clear that, electroluminescent display device is a known device which broadly use for displaying image, Line teaches a rear view mirror and video display comprises a electroluminescent display [2] (cited in col. 4, lines 14-16]. It would have been obvious of one having ordinary skill in the art to at the time the invention was made, to employ an electroluminescent display as taught by Line, into the system of Lang et al. for the advantage of be able to view both mirror and video display.

4. Claims 5-10 and 31-33, 35-37, 39-40, 42-43, 45-46 and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. [US 6,642,840] in view of Yang [US 2002/0154007].

Regarding to claims 5-10: Lange et al. disclose a vehicle comprising:

- a side mirror [26] and back mirror [24];
- a camera [8];
- a display device [6] mounted in the side mirror 26 and back mirror 24, wherein the display device displays information read from the camera [shown in Fig. 1-6, col. 3, lines 40-54, and col. 4, lines 37-50].

Lang et al. does not specify a central processing unit for processing video signal, distance sensor signal and a control circuit for displaying at a display device.

Art Unit: 2632

It is known in the art that, most video image signal from camera or sensor signal must be processed prior to output display, Yang teaches car reverse alerting and multi-functional display, which comprises a central processing unit 351, which processing video signal from camera, distance sensor [23], and wherein the control circuit is obviously included in the central processing unit, for controlling the output signal to display device [as shown in Fig. 2-4, ¶ 0017 and 0019]. It would have been obvious of one having ordinary skill in the art at the time the invention was made to have a central processing unit and distance sensor as taught by Yang, into the system of Lang et al. for the benefit of be able to process multiple input from multiple safety devices.

Regarding to claims 31-33, 35-37, 39-40, 42-43, 45-46 and 48-49: Lang et al. disclose all the limitation as described above, Lang et al. further disclose a camera 8, LCD display and wherein a half mirror is provide in the side mirror [cited in col. 3, lines 55-62].

5. Claims 34, 38, 41, 44, 47 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. [US 6,642,840] in view of Yang [ US 2002/0154007], and further in view of Lin [US 5,956,181].

Regarding to claims 34, 38, 41, 44, 47 and 50: Lang et al. disclose all the limitation as described above, Lang et al. does not specify that the display is an electroluminescent display device. It is clear that, electroluminescent display device is a known device which broadly use for displaying image, Line teaches a rear view mirror and video display comprises a electroluminescent display [2] (cited in col. 4, lines 14-16]. It would have been obvious of one having ordinary skill in the art to at the time the invention was made, to employ an

Art Unit: 2632

electroluminescent display as taught by Line, into the system of Lang et al. for the advantage of be able to view both mirror and video display.

6. Claims 11-12, 51-52 and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. [US 6,642,840] in view of Keith [US 5,847,643].

Regarding to claims 11-12: Lang et al. disclose a vehicle comprising:

- a side mirror [26] and back mirror [24];

- a display device [6] mounted in the side mirror 26 and back mirror 24, wherein the display device displays information read from the camera [shown in Fig. 1-6, col. 3, lines 40-54, and col. 4, lines 37-50].

Lange fails to specify that vehicle comprises an impact sensor.

Keith teaches a vehicle comprising an impact sensor 50, for detecting vehicle impact with other objects and signaling driver [see Fig. 1-5, and Abstract]. Since, impact sensor is one of a safety device for vehicle, therefore, it would have been obvious of one having ordinary skill in the art at the time the invention was made to employ an impact sensor as taught by Keith into the system of Lang et al. for increasing safety.

Regarding to claims 51-52 and 54-55: Lange et al. further disclose a LCD display and wherein a half mirror is provide in the side mirror [cited in col. 3, lines 55-62].

7. Claims 53 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. [US 6,642,840] in view of Keith [US 5,847,643] and further in view of Lin [US 5,956,181].

Regarding to claims 53 and 56: Lang et al. and Keith disclose all the limitation as described above, Lang et al. does not specify that the display is an electroluminescent display device. It is clear that, electroluminescent display device is a known device which broadly use for displaying image, Line teaches a rear view mirror and video display comprises a electroluminescent display [2] (cited in col. 4, lines 14-16). It would have been obvious of one having ordinary skill in the art to at the time the invention was made, to employ an electroluminescent display as taught by Line, into the system of Lang et al. and Keith for the advantage of be able to view both mirror and video display.

8. Claims 13-16, 57-58, 60-61, 63-64 and 66-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. [US 6,642,840] in view of Keith [US 5,847,643], and further in view of Yang [US 2002/0154007].

Regarding to claims 13-16: Lange et al. disclose a vehicle comprising:

- a side mirror [26] and back mirror [24];
- a camera [8];
- a display device [6] mounted in the side mirror 26 and back mirror 24, wherein the display device displays information read from the camera [shown in Fig. 1-6, col. 3, lines 40-54, and col. 4, lines 37-50].

Lang et al. does not specify an impact sensor for sensing an impact;

Keith teaches a vehicle comprising an impact sensor 50, for detecting vehicle impact with other objects and signaling driver [see Fig. 1-5, and Abstract]. Since, impact sensor is one of a safety device for vehicle, therefore, it would have been obvious of one having ordinary skill in

Art Unit: 2632

the art at the time the invention was made to employ an impact sensor as taught by Keith into the system of Lang et al. for increasing safety.

Lang et al. does not specify a central processing unit for processing video signal, distance sensor signal, impact signal, microphone signal and a control circuit for displaying a warning based at a display device.

It is known in the art that, most sensing signals including (video, distance, impact and microphone) must be determined at central processor prior to output at display, Yang teaches car reverse alerting and multi-functional display, which comprises a central processing unit 351, which for processing all sensing feature of vehicle (such as CCD, microphone, distance sensor etc.) [as shown in Fig. 2-3], and wherein the control circuit is obviously included in the central processing unit, for controlling the output signal to display device [as shown in Fig. 2-4, ¶ 0017 and 0019]. It would have been obvious of one having ordinary skill in the art at the time the invention was made to have a central processing unit as taught by Yang, into the combination system above, for the benefit of be able to process multiple input from a plurality safety devices.

Regarding to claims 57-58, 60-61, 63-64, 66-67: Lange et al. further disclose a LCD display and wherein a half mirror is provide in the side mirror [cited in col. 3, lines 55-62].

9. Claims 59, 62, 65 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. [US 6,642,840], Keith [US 5,847,643] in view of Yang [US 2002/0154007], and further in view of Lin [US 5,956,181].

Regarding to claims 59, 62, 65 and 68: Lang et al. and the combination, disclose all the limitation as described above, they are not specify that the display is an electroluminescent



Art Unit: 2632

display device. It is clear that, electroluminescent display device is a known device which broadly use for displaying image, Line teaches a rear view mirror and video display comprises a electroluminescent display [2] (cited in col. 4, lines 14-16). It would have been obvious of one having ordinary skill in the art to at the time the invention was made, to employ an electroluminescent display as taught by Line, into the system of combination above, for the advantage of be able to view both mirror image and video display.

### *Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iwama [US 5,634,709] and Gutta et al. [US 6,424,273].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M Tang whose telephone number is (703)306-5970. The examiner can normally be reached on 4/9 First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J Wu can be reached on (703)308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang

TOAN N. PHAM  
PRIMARY EXAMINER

*Toan N. Pham*  
6/25/04